

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

SOLAS OLED LTD.,  v.  DELL INC.,	<i>Plaintiff,</i>   <i>Defendant.</i>	Case No. 6:19-cv-00514-ADA
SOLAS OLED LTD.,  v.  GOOGLE LLC,	<i>Plaintiff,</i>   <i>Defendant.</i>	Case No. 6:19-cv-00515-ADA
SOLAS OLED LTD.,  v.  APPLE INC.,	<i>Plaintiff,</i>   <i>Defendant.</i>	Case No. 6:19-cv-00537-ADA
SOLAS OLED LTD.,  v.  HP INC.,	<i>Plaintiff,</i>   <i>Defendant</i>	Case No. 6:19-cv-00631-ADA

**SOLAS’S RESPONSIVE CLAIM CONSTRUCTION BRIEF<sup>1</sup>**

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<sup>1</sup> The captioned cases are consolidated for claim construction briefing and hearing. Thus, Solas will file an identical copy of its claim construction papers in those cases.

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Ex <sup>2</sup>	Document Description	Abbreviation
1	Declaration of Richard A. Flasck in support of Solas's opening claim construction brief	Flasck. Decl.
2	U.S. Patent No. 6,072,450	'450 patent
3	U.S. Patent No. 7,447,338	'338 patent
4	U.S. Patent No. 7,573,068	'068 patent
5	U.S. Patent No. 7,499,042	'042 patent
6	U.S. Patent No. 7,663,615	'615 patent
7	Parties' joint revised list of terms/constructions served June 12, 2020	Joint Chart
8	The Authoritative Dictionary of IEEE Standards Terms (7th ed. 2000) ("IEEE Dictionary"), definitions of "drain," "source," "select," and "substrate"	IEEE Dict.
9	Microsoft Computer Dictionary (3rd ed., 1997), definition of "signal" and "scan line"	MS Dict.
10	McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989), definitions of "data transmission line," "source," "drain," and "selection circuit"	McGraw-Hill
11	Merriam-Webster Dictionary (avail. at <a href="http://www.merriam-webster.com">www.merriam-webster.com</a> , accessed May 2020), definitions of "select," "selection," "sequential," and "series."	Merriam-Webster
12	Dictionary.com (avail. at <a href="http://www.dictionary.com">www.dictionary.com</a> , accessed May 2020), definitions of "period," "section," "sequence," and "sequential"	Dictionary.com
13	Oxford Concise Dictionary (12th ed., 2011), definitions of "period" and "section"	Oxford Concise
14	Claim Construction Memorandum and Order from <i>Solas OLED Ltd. v. Samsung Display Co., Ltd.</i> , 2:19-CV-00152-JRG, Dkt. 99 (E.D. Tex. Apr. 17, 2020)	Samsung Markman
15	Claim Construction Order from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 82, Case 6:19-cv-00236-ADA (W.D. Tex. June 9, 2020)	LG/Sony Markman
16	Parties' Joint Claim Construction Statement from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 76, Case 6:19-cv-00236-ADA (W.D. Tex. May 1, 2020)	LG/Sony JCC

<sup>2</sup> Exhibits 1–22 were submitted with Solas's opening claim construction brief. Exhibits 23–25 are submitted with this brief.

17	HP's proposed claim constructions, Case No. 6:19-cv-00631-ADA, served May 22, 2020	HP's Proposed Constructions
18	Solas's Disclosure of Asserted Claims and Infringement Contentions Against Samsung, Case No. 2:19-cv-00152-JRG (E.D. Texas), Oct. 7, 2019	Samsung Contentions
19	Apple's proposed terms for construction, Case No. 6:19-cv-00537-ADA, served Apr. 30, 2020	Apple's Proposed Terms
20	Apple's proposed claim constructions, Case No. 6:19-cv-00537-ADA, served May 22, 2020	Apple's Proposed Constructions
21	Excerpts of transcript of April 14, 2020, Telephonic Motion Hearing from <i>Solas v. Dell and Google</i> , Case Nos. 6:19-cv-00514-ADA, 6:19-cv-00515-ADA.	Motion Hearing Tr.
22	The New Oxford American Dictionary, Second Edition (2005)	New Oxford American Dictionary
23	Declaration of Richard A. Flasck in support of Solas's responsive claim construction brief	Flasck Resp. Decl.
24	Excerpts of the April 13, 2020 deposition transcript of Douglas R. Holberg from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 82, Case 6:19-cv-00236-ADA	Holberg Dep.
25	Patent Owner's response to supplemental pre-institution brief, IPR2020-00320, Paper 8, dated May 11, 2020	Solas Pre-inst. Br.

# I. DISPUTED TERMS FOR '338 PATENT

## A. “transistor array substrate” ('338 patent claims 1, 4)

Solas’s Proposed Construction	Defendants’ Proposed Construction
layered structure upon which or within which a transistor array is fabricated	a layered structure <u>composed of a bottom insulating layer through a topmost layer on whose upper surface pixel electrodes are formed</u> , which contains an array of transistors

Defendants’ opening brief repeats arguments that intervenor Samsung—the supplier of the OLED panels in the products accused of infringing the '338 patent—unsuccessfully made before Judge Gilstrap. For example, Defendants argue that “transistor array substrate” has “no customary meaning in the art.” But as Solas demonstrated in its opening brief and as Judge Gilstrap found, “substrate” does have a well-established meaning in the relevant art. Ex. 14, Samsung Claim Construction Order, at 11. The construction adopted by Judge Gilstrap accords with that established meaning and with a POSITA would understand the term “transistor array substrate.”

Judge Gilstrap also considered and rejected Defendants’ argument against including the phrase “upon which or within which” in the construction. Ex. 14, Samsung Claim Construction Order, at 14. As Judge Gilstrap correctly found, the “evidence cited by Defendants does not compel requiring the array of transistors to be within, let alone entirely within, the substrate.” *Id.* Solas agrees with Samsung that the “transistor array substrate . . . comprises a plurality of transistors,” as the claims plainly require. Ex. 3, '338 patent at 24:15–17. Nothing in Solas’s construction of “transistor array substrate” does or could change that requirement of the claims. Solas’s construction expressly requires that the transistor array substrate have a “transistor array,” either formed on the surface of the substrate or formed within the substrate. However, to the extent that the Court believes that the “comprises a plurality of transistors” is not by itself clear and that its

requirement should be repeated in the construction of “transistor array substrate,” Solas would not object to such a clarification.

Defendants’ argument that Judge Gilstrap’s construction “would leave indeterminate which layers are part of the transistor array substrate,” Dkt. 47 at 5, imposes an overly restrictive standard on patent claim language. It is simply not true that one must be able to look at a single claim term such as “transistor array substrate” in isolation and be able to find one and only one structure in an accused product that satisfies that claim term. The claims of the ’338 patent contain many terms such as “plurality,” “a layer,” “a surface,” “at least one of,” and “sets” that—taken in isolation—can be mapped in multiple ways to the same accused product. ’338 patent at 24:14–58. For example, claim 6 requires that “said plurality of pixels comprises a plurality of sets.” *Id.* at 24:6–7. In any given embodiment, there is likely to be more than one way to identify the “plurality of pixels,” and there is certain to be more than one way of dividing them into “sets.” That is neither remarkable nor improper in a patent claim. It would have been perfectly proper for the patentee to have written a claim with the phrase “layered structure,” without explicitly identifying what the top and bottom layers of that structure must be. It is just as proper for the Court to adopt a construction for this term that permits flexibility in identifying the top and bottom layers.

The cases Defendants cite finding that a sentence with the word “is” or “i.e.” constituted lexicography are distinguishable. In *Sinorgchem*, the term being defined was placed in quotes in that sentence. *Sinorgchem Co., Shandong v. Int’l Trade Comm’n*, 511 F.3d 1132, 1136 (Fed. Cir. 2007). The Federal Circuit noted that the use of quotation marks around a term is “often a strong indication” of lexicography, but described the use of “is” as weaker evidence, which merely “may signify” lexicography. *Id.* at 1136. Indeed, the source of the quotation used by Defendants that “‘is’ . . . may signify” lexicography was a case where the Federal Circuit found that “is” did not



signify lexicography. *Abbott Laboratories v. Andrx Pharm., Inc.*, 473 F.3d 1196, 1210 (Fed. Cir. 2007) (finding no lexicography in the sentence: “The pharmaceutically acceptable polymer is a water-soluble hydrophilic polymer . . .”). Furthermore, the “is” sentence in *Sinorgchem* was a categorical statement, in contrast to the statement that Defendants rely on in the ’338 patent that is expressly describing elements of a preferred embodiment. Likewise, in *Edwards*, the “i.e.” statement was categorical, as opposed to the “i.e.” statement of the ’338 patent that is expressly limited to elements of the Figure 6 preferred embodiment. *Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1334 (Fed. Cir. 2009).

As for Solas’s statements before the Patent Trial and Appeal Board, these statements, made in a patent owner preliminary response were pointing out that the arguments that Samsung was presenting to the Board were inconsistent with the positions Samsung was taking in district court. Solas Pre-inst. Br. at 8 (“The Patent Owner’s Preliminary Response explains how the combination of Childs with Shirasaki fails to satisfy the construction of ‘transistor array substrate’ advanced by Petitioner in district court.”) This is relevant to whether the Board should have used its discretion to institute an IPR proceeding, and it not an endorsement of Samsung’s (unsuccessful) arguments in the district court.

**B. “project from a surface of the transistor array substrate” (’338 patent claim 1)**

<b>Solas’s Proposed Construction</b>	<b>Defendants’ Proposed Construction</b>
extend from an external surface of the transistor array substrate	extend <u>above the upper surface</u> of the transistor array substrate

For this term as well, Defendants repeat arguments that intervenor Samsung unsuccessfully made before Judge Gilstrap. The claims of the ’338 patent say “a surface,” not “the upper surface.” While it was appropriate for Judge Gilstrap to clarify that this “surface” is an outer surface, it is not proper to impose the further requirement that it be “the upper surface,” simply because the

specification sometimes describes the interconnections as projecting from the “upper surface.” Contrast Ex. 3, ’338 patent at 11:36–41 (“from the upper surface”) with id. at 10:54–58 (“from the surface”). This is simply disregarding the words of the claim “a surface” to import a feature from the specification “the upper surface” as a limitation.

Likewise, Defendants’ arguments concerning “partition walls” and “leakage” do not support their construction. Nothing in the claims refers to the interconnections serving as partition walls or preventing leakage. And nothing in the specification suggests that the interconnections must project from a specific “upper” surface in order to perform their (unclaimed) role of preventing leakage. ’338 patent at 6:24–30, 6:38–42, 12:62–13:3, 22:62–66. Interconnections that project from the local surface of the transistor array substrate can serve as partitions on that surface, even if there may be some other “upper” surface elsewhere on the substrate.

Defendants’ improper effort to limit the claims should be rejected and Judge Gilstrap’s construction of “extend from an outer surface of the transistor array substrate” should be adopted.

## II. DISPUTED TERMS FOR ’068 PATENT

### A. “signal lines” / “supply lines” (’068 patent claims 1, 13)

Term	Solas’s Proposed Construction	Defendants’ Proposed Construction
“signal lines”	conductive lines supplying signals	conductive lines <b>carrying data</b>
“supply lines”	conductive lines supplying current or voltage	conductive lines, <b>each</b> supplying a <b>driving</b> current or voltage to a <b>plurality of pixel circuits</b>

Defendants group these two terms together to identify a purported inconsistency in Solas’s proposals. There’s none. Solas’s proposal for “signal lines” was the Court’s construction in the LG case. And Solas’s proposal for “supply lines” was Solas and LG’s agreed construction. Both constructions were correct and should also be adopted here.

Defendants primarily and repeatedly argue that Solas’s proposals would treat the terms as “interchangeable.” Defs. Br. at 29–30. This fails for multiple reasons. First, the Court found no issue with those constructions in the LG case. Second, Solas’s proposals are different. Whereas “signal lines” supply *signals*, supply lines supply *current or voltage*. And “signals” is not identical to “current or voltage.” *See* MS Dict. at 435 (“signal *n.* 1. Any electrical quantity, such as voltage, current, or frequency, that can be used to transmit information”).

Third, the two constructions are substantively different. For example, a line that simply connects a battery to a circuit would meet Solas’s proposal for supply lines as “conductive lines supplying current or voltage.” It would not meet Solas’s proposal of signal lines as “conductive lines supplying signals.” Fourth, the two terms are not “interchangeable” in view of the claims. Claims 1 and 13 of the ’068 patent recite both terms and impose different requirements upon each. For example, claim 1 requires the signal lines to be patterned together with the gates of driving transistors, whereas the supply lines are patterned together with the sources and drains. Fifth, Defendants fail to explain what they mean by “interchangeable” or why that shows the constructions are incorrect. Certainly, different terms can have similar or synonymous meanings.

Thus, Defendants fail to show any tension between Solas’s proposals for “signal lines” and “supply lines.” Nor do Defendants justify their own proposals for either term. As to signal lines, Defendants do not allege that “conductive lines carrying data” is the plain meaning or suggest that the patentee defined signal lines to mean “carrying data.” Their sole argument is one example of “a data driver” supplying a current signal to the signal lines. *See* Defs. Br. at 29 (citing ’068 patent at 15:61–63). But this does not mean that signal lines must always and only “carry data”—nor justify importing features of embodiments into the claims. And it fully supports Solas’s proposal because the supplied current signal is undoubtedly a “signal.”

As to supply lines, Defendants’ proposal is even more incorrect. Defendants’ convoluted proposal of “conductive lines, *each* supplying a *driving* current or voltage to a *plurality of pixel circuits*” is certainly not the plain meaning and loaded with features from optional embodiments. Solas already explained that the specification describes supplying signals to supply lines other than “driving” currents or voltage. *See* Solas Br. at 13–14. As another example, Fig. 14 describes an oscillation circuit that “outputs a *clock signal* to the feed interconnections 90 and *supply lines*  $Z_1$  to  $Z_m$ .” ’068 patent at 16:62–65; Fig. 14. Defendants also argue that the figures show multiple pixel circuits and supply lines connected to them. *See* Defs. Br. at 30. But this is unsurprising and falls far short of proving that each “supply line” always requires a plurality of pixel circuits.

What the patentee claimed was “supply lines,” not supply lines for driving or supply lines connected to a plurality of pixel circuits. Thus, there is a “heavy presumption” that the term covers the “full ordinary and customary meaning” of “signal lines.” *Epistar Corp. v. ITC*, 566 F.3d 1321, 1334 (Fed. Cir. 2009). Defendants fail to show any lexicography or clear and unmistakable disclaimer to support narrowing “supply lines” from its plain and ordinary meaning.

**B. “formed on said plurality of supply lines along said plurality of supply lines” (’068 patent claim 1) / “connected to said plurality of supply lines along said plurality of supply lines” (’068 patent claim 13)**

Term	Solas’s Proposal	Defendants’ Proposal
“formed on said plurality of supply lines along said plurality of supply lines”	<u>formed on</u> said plurality of supply lines <u>over the length or direction of</u> said plurality of supply lines	<u>stacked on or making multiple contacts with</u> said plurality of supply lines <u>over the length of each supply line</u>
“connected to said plurality of supply lines along said plurality of supply lines”	<u>connected to</u> said plurality of supply lines <u>over the length or direction of</u> said plurality of supply lines	

The table above showing the parties’ proposed constructions speaks for itself. Defendants’ proposal changes the claim language in two ways. First, Defendants take the term “formed on” (in

claim 1) or “connected to” (in claim 13) and rewrite both as “stacked on or making multiple contacts with.” Second, Defendants take the term “along said plurality of supply lines” and replaces it with “over the length of each supply line.” Both are unjustified and must be rejected.

*“Stacked On Or Making Multiple Contacts With.”* Defendants devote almost no argument to this portion of their proposal. *See* Defs. Br. at 25–27. Defendants merely allege that the ’068 patent discloses “two ways to ‘form’ or ‘connect’ the feed interconnections to the supply lines,” and that “Defendants’ construction accurately reflects these two disclosures.” Of course, this is improper under Federal Circuit law and courts do not import limitations from embodiments into the claims. *Hill-Rom Serv., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’”).

Both “formed on” and “connected to” are common English words and the ’068 patent uses those words in ordinary sense. They are also readily understandable to the jury. And *neither* means Defendants’ convoluted phrase “stacked on or making multiple contacts with.” The patentee never redefined both terms in this way. Thus, “formed on” and “connected to” should carry their full plain meaning. *See Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003) (“We indulge a ‘heavy presumption’ that claim terms carry their full ordinary and customary meaning, unless the patentee unequivocally imparted a novel meaning to those terms[.]”).

Defendants’ proposal is also suspect because it assigns the *identical construction* to both terms (as well as to the longer limitations of which they are a part). For the earlier disputed terms “signal lines” / “supply lines,” Defendants vociferously argued that such constructions are incorrect and berated Solas for doing that. *See* Defs. Br. at 29 (“Solas’s constructions erase any

distinction between [the terms], making them interchangeable”) (“it is axiomatic that ‘different claim terms are presumed to have different meanings’”), 30 (“Solas’s proposals are substantively identical” and therefore “should be rejected.”). As explained, Defendants are wrong because Solas’s proposals for “signal lines” / “supply lines” are different. But it is ironic that Defendants criticize exactly what they are doing here. Defendants’ proposals for “formed on” and “connected to” *are* identical. And according to Defendants’ *own* argument over pages (Defs. Br. at 29–30), their proposed constructions “should be rejected.”

“*Over the Length of Each Supply Line.*” Defendants’ proposal also replaces the claim term “along said plurality of supply lines” with “over the length of each supply line.” For this substitution, Defendants’ merely rehash arguments from the LG case. In that case, the only dispute between the parties was whether “along” meant “over the length or direction of” (Solas’s proposal) or “over the length of” (LG/Sony’s proposal). The Court already resolved that dispute in Solas’s favor and found that the plain meaning of “along” was not limited to “over the length of.”

Undeterred, Defendants merely repeat LG’s *same* arguments, including the hackneyed attack that Solas’s proposal permits the feed interconnections to be formed on / connected to the supply lines at a single point. Defs. Br. at 25 (arguing that Solas’s constructions encompass “an arrangement where a supply line has only a single contact with one feed connection”), 28 (“a supply line making a single contact with only one feed interconnection would fall outside the scope of the claims”). But Solas already refuted that mischaracterization, repeatedly explaining that its proposal does not cover something that is “formed on” or “connected to” only at a single arbitrary point. Defendants acknowledge this. *Id.* at 28. Thus, it’s puzzling why Defendants waste so much space rehashing the same straw man attack.

Defendants also carry over LG’s arguments about the “benefits” of the ’068 patent, including the goals of avoiding “voltage drops” and “signal delays.” *See* Defs. Br. at 25–26, 28. But again, Solas already refuted that argument. As Solas explained, the ’068 itself makes clear that the feed interconnections do not need to run the full length of the supply lines to provide some mitigation of the voltage drop problem—and a POSITA would know this. And regardless, precisely how far the interconnections might run to obtain precisely how much benefit does not matter in the eyes of the Federal Circuit. Neither LG, nor Defendants here, can cite any caselaw holding that that benefits described in the specification should be imported into the claims. Because there is none—let alone any that would trump the heavy presumption that the term “along” carries its full ordinary and customary meaning. *See Omega Eng’g*, 334 F.3d 1314 at 1323.

Defendants then cite Solas expert Mr. Flasck’s deposition in the LG case for the alleged concession that feed interconnections connected to supply lines at “only at one point” would not achieve the full benefits of the invention. *See* Defs. Br. at 28. But (a) “at a single point” has never been Solas’s position and (b) whether that scenario would reduce some measure of benefit is irrelevant to whether those benefits should be imported into the claims. If Defendants want to rely on deposition testimony from the LG case, the testimony of LG’s expert Dr. Holberg is far more probative. Dr. Holberg undermined the positions advanced on this term. He repeatedly testified that “along” could be satisfied by going over the entire length *or merely a portion of the length*. Holberg Depo. at 131:24–133:8, 133:25–134:7, 135:16–18. And he agreed that the purported “purpose” of minimizing resistance or voltage drops that Defendants now rely on are found nowhere in the claims. *Id.* at 148:5–6, 148:21–149:10.

Finally, Defendants provide zero support for changing the claim term “along *said plurality of supply lines*” to “over the length of *each supply line*.” The claim describes a relationship between

interconnections (plural) and supply lines (plural). There is no reason to rewrite it as a relationship between interconnections (plural) and *each* supply line (singular). Not even LG suggested such a requirement. Defendants’ proposal incorporates LG’s proposal but includes additional, unsupported limitations. It is even more incorrect and should be rejected.

**C. “source” / “drain” (’068 patent claims 1, 5, 12, 13, 17)**

Term	Solas’s Proposed Construction	Defendants’ Proposed Construction
“source”	Plain and ordinary meaning	source <u>electrode</u>
“drain”	Plain and ordinary meaning	drain <u>electrode</u>

Defendants seek to construe the terms “source” / “drain” as “source electrode” / “drain electrode.” Their primary argument is disclaimer by implication. *See* Defs. Br. at 31 (citing *Bell Atlantic*). But the intrinsic evidence does not support this argument. The specification uses the terms “source,” “drain,” and “electrode” hundreds of times, but *never* once uses the terms “source electrode” or “drain electrode.” In contrast, the specification does describe “gate electrodes,” “pixel electrodes,” and “counter electrodes.” ’068 patent at 2:17, 3:48, 3:53. Likewise, the claims recite “source,” “drain,” “pixel electrode” and “counter electrode,” but never recites “source electrode” or “drain electrode.” *See id.* cls. 1, 5 12, 13, 17.

The overwhelming implication of this usage is that the patentee knew how to—but did not—claim a “source electrode” or “drain electrode.” Instead, the patentee chose the terms “source” and “drain.” The Court should not rewrite them differently from what the patentee wrote and the examiner allowed. *See Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366–67 (Fed. Cir. 2012) (“[W]e do not redefine words. Only the patentee can do that.”).

Defendants’ arguments for redefinition fail for multiple reasons. The cited discussion of Fig. 5 does not even say “electrode”—much less “source electrode” or “drain electrode.” *See* Defs.



Br. at 31 (citing '068 patent at 8:64–66, 9:36–44). Defendants' attorney argument about the meaning of technical terms and evidence should be disregarded. *See Invitrogen Corp. v. Clontech Labs., Inc.*, 429 F.3d 1052, 1080 (Fed. Cir. 2005) ("Unsubstantiated attorney argument regarding the meaning of technical evidence is no substitute for competent, substantiated expert testimony."). Indeed, Solas's expert Mr. Flasck disputes Defendants' interpretation of the specification. As he explained, a POSITA would understand that the "source" and "drain" are symmetrical structures at opposite ends of the channel region. Flasck Decl. ¶¶ 98–101. A POSITA would not understand that the source and drain must be electrodes. *Id.* ¶ 101.

Defendants' discussion of dictionary definitions is also attorney argument and regardless unavailing. *See* Defs. Br. at 32 n.4. One definition says that source / drain are "*usually*" a metal contact, which means they need not be. Other definitions use "electrode" only in the context of a "field-effect transistor." Mr. Flasck also relies on four definitions of source / drain—none of which use the word "electrode." *See id.* ¶ 102 (citing IEEE at 337, 1074; McGraw Hill at 557, 1777). Based on these definitions, he opines that importing the term "electrode" is inappropriate. *Id.*

Finally, Defendants' complain that source / drain "provides no guidance" about what those terms encompass. *See* Defs. Br. at 32. But Defendants' proposals merely take the same terms and add another to term "electrode." Defendants never explain what "electrode" means or provide any extrinsic evidence that might clarify them. This only confirms Mr. Flasck's opinion that "electrode" is itself ambiguous and may require further construction. Flasck Decl. ¶ 99.

### III. DISPUTED TERMS FOR '042 PATENT

Solas begins with some comments relevant to the disputed terms. HP's description of the '042 patent background improperly states that the patent is "directed to an OLED display panel shown in Figure 1." Defs. Br. at 8. Figure 1 is simply a depiction of an exemplary embodiment. '042 Patent at 3:39–41 ("FIG. 1 is a block diagram of an organic electroluminescent display 1 according to the *first embodiment* of the present invention.") (emphasis added). And it is well-established that "the mere fact that the patent drawings depict a particular embodiment of the patent does not operate to limit the claims to that specific configuration." *Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d 1143, 1148 (Fed. Cir. 2003).

HP also erroneously refers to the selection scan lines in Fig. 4 as being "turned on" and "turned off." Defs. Br. at 8. But the corresponding description makes clear that it is the *transistors* in the pixel driver(s) that are turned on and off—not the selection scan lines. The selection scan lines are either selected or not selected. For example, in describing the selection period  $T_{SE}$  in which the "the selection scan line  $X_i$  in the  $i$ th row is selected," the specification explains:

[W]hen the selection scan driver 5 applies the ON Voltage  $V_{ON}$  to the selection scan line  $X_i$ , the ***selection scan line  $X_i$  in the  $i$ th row is selected***. A period in which the selection scan driver 5 applies the ON Voltage  $V_{ON}$  to the selection scan line  $X_i$  in the  $i$ th row and thereby ***selects the selection scan line  $X_i$  in the  $i$ th row*** is called a selection period  $T_{SE}$  of the  $i$ th row. Note that while applying the ON Voltage  $V_{ON}$  to the selection scan line  $X_i$ , the selection scan driver 5 applies the OFF Voltage  $V_{OFF}$  to the other selection scan lines  $X_1$  to  $X_m$  (except for the selection scan line  $X_i$ ). Accordingly, the selection periods  $T_{SE}$  of the selection scan lines  $X_1$  to  $X_m$  do not overlap each other.

When the selection scan driver 5 applies the ON Voltage  $V_{ON}$  to the selection scan line  $X_i$  in the  $i$ th row, the ***first and second transistors 21 and 22 are turned on*** in each of the pixel circuits  $D_{i,1}$  to  $D_{i,n}$  connected to the selection scan line  $X_i$  in the  $i$ th row. Since the ***first transistors 21 are turned on***, an electric current which flows through the current lines  $Y_1$  to  $Y_n$  can flow through the pixel circuits  $D_{i,1}$  to  $D_{i,n}$ .

After the selection period  $T_{SE}$  in which the ***selection scan line  $X_i$  in the  $i$ th row is selected***, the selection scan driver 5 applies the OFF Voltage  $V_{OFF}$  to the selection scan line  $X_i$  to cancel the ***selection of the selection scan line  $X_i$*** . As a consequence, in each of the pixel circuits  $D_{i,1}$  to  $D_{i,n}$  connected to the selection scan line  $X_i$  in the  $i$ th row, the ***first and second***

*transistors 21 and 22 are turned off.* Since the first *transistors 21 are turned off*, the electric current which flows through the current lines  $Y_1$  to  $Y_n$  cannot flow through the pixel circuits  $D_{i,1}$  to  $D_{i,n}$  any longer.

'042 Patent at 9:20–49; *see also id.* at 10:19–27 (describing the “non-selection period  $T_{NSE}$  in which the selection scan line  $X_i$  in the  $i$ th row is not selected” and the electric current that flows “from the voltage supply line  $Z_i$  to the organic EL element  $E_{i,j}$  if the driving transistor 23 is  $ON$  and the transistor 21 is  $OFF$ ” (emphases added).

A. “selection period” ('042 patent claim 1)

Solas's Proposed Construction	HP's Proposed Construction
time <b>period</b> during which a plurality of pixel circuits is <b>selected</b>	time <b>duration</b> in which a selected selection scan line is <b>kept active</b>

HP's proposed construction is based on the false premise that when a “selection scan line” is selected, it is “active” and “turned on,” and when it is not selected, it is “not kept active” and “turned off.” Defs. Br. at 9. But as explained above, the specification makes clear the selection scan lines are simply selected or not selected (it is the transistors that are turned on or turned off by applying the  $V_{ON}$  or  $V_{OFF}$  voltage, respectively). '042 Patent at 9:13–10:47. Nothing in the specification refers to the selection scan line itself as being “on” or “off.” And there are no references to *any component* being “kept active.” Indeed, the phrase “kept active” does not appear anywhere in the patent specification all, and certainly not with respect to the selection scan line.<sup>3</sup> HP's attempt to import this extraneous limitation into the claim is unsupported. It is also confusing, as HP fails to identify anything in the patent or in the relevant art that explains what it means for the selection scan line to be “kept active.” Flasck Decl. ¶ 105.

<sup>3</sup> The word “active” itself appears only a handful of times in the background of the invention, and only in the context of an “active matrix” LCD. '042 Patent at 1:21–28. “Active” does not appear anywhere else in the patent, and never in conjunction with the selection scan line.

HP's assertion that the notion of "*keeping* the selection active" must be included because under Solas's construction, the "selection period" could encompass periods "when a line or circuit is inactive and not selected" (Defs. Br. at 9) is nonsensical. Solas's proposal clearly provides that the "selection period" is the "time period *during which* a plurality of pixel circuits *is selected*."

HP also asserts that Solas's proposal "contradicts the specification, which uses another term, 'non-selection period,' to refer to periods when a 'selection scan line' is inactive." Defs. Br. at 9. But similar to the "selection period," the "non-selection period" clearly references the time period in which the plurality of pixel circuits is simply "not selected." *See, e.g.*, '042 Patent at 9:48–53 ("a period in which the selection scan driver 5 applies the OFF voltage  $V_{OFF}$  to the selection scan line  $X_i$  in the  $i$ th row and thereby keeps the *selection scanline  $X_i$  in the  $i$ th row unselected* is called a non-selection period  $T_{NSE}$  of the  $i$ th row"). There is no reference to the selection scan line being "inactive" during this period—and in fact, the word "inactive" does not appear anywhere in the patent at all. Nor is there any reference to the selection scan line being turned "off." Rather, the specification explains that a different, lower voltage  $V_{OFF}$  is simply applied during the non-selection period. *See, e.g.*, '042 Patent at 9:13–19 ("the selection scan driver 5 individually applies, to the selection scan lines  $X_1$  to  $X_m$ , a high-level (ON-level) ON Voltage  $V_{ON}$  (much higher than the reference Voltage  $V_{SS}$ ) as a selection signal or a ***low-level OFF voltage  $V_{OFF}$  (equal to or lower than the reference Voltage  $V_{SS}$ ) as a non-selection signal***, thereby sequentially selecting the selection scan lines  $X_1$  to  $X_m$ " (emphasis added)). Therefore, it is HP's proposal, not Solas's, that contradicts the specification. Solas's proposal is entirely consistent with the specification's use of the term "non-selection period."

HP's argument that Solas's proposal "disregards that the specification expressly defines a 'selection period' in relation to the 'selection scan line' for a row of pixel circuits" also fails. Defs.

Br. at 9. The portion of the specification relied on by HP provides that “a period in which the selection scan driver 5 . . . selects the selection scan line  $X_i$  in the  $i$ th row is called a selection period  $T_{SE}$  of the  $i$ th row.” ’042 patent at 9:22–27. And as explained in Solas’s opening brief, the specification also describes that “selection scan line” comprises “a plurality of pixel circuits.” *Id.* at 2:46–48 (“a plurality of pixel circuits which are connected to the plurality of selection scan lines”), 3:17–20 (“A display panel driving method according to still another aspect of the present invention comprises, a selection step of sequentially selecting a plurality of selection scan lines of a display panel comprising a plurality of pixel circuits”); 7:65–67 (“In the second transistor 22 of each of the pixel circuits  $D_{i,1}$  to  $D_{i,n}$  in the  $i$ th row, a gate 22g is connected to the selection scan line  $X_i$  in the  $i$ th row”); Flasck Decl. ¶ 103. Moreover, HP’s proposal cannot be correct and is confusing because the term “selection scan line” is already in the claim, and it would be redundant to inject this term into the definition of “selection period.” For example, under HP’s proposal, the limitation “a selection scan driver which sequentially selects said plurality of selection scan lines in each *selection period*” would read: “a selection scan driver which sequentially selects said plurality of selection scan lines in each *time duration in which a selected selection scan line is kept active*.” Solas’s proposal avoids this redundancy and thus should be adopted.

HP’s reliance on certain statements made during the prosecution of European Patent Application No. 1,372,136 (“EP ’136”) should be rejected. Contrary to HP’s assertions, the Federal Circuit in *Glaxo* did *not* generally hold that “statements made in prosecution of a related foreign counterpart patent are relevant to construing claims of a U.S. patent.” Defs. Br. at 11. Rather, the Federal Circuit found that statements from a UK application were relevant under a specific and narrow set of circumstances where (1) the patent-in-suit claimed priority to the UK application, and (2) during prosecution of the patent-in-suit, the patentee submitted a copy of the UK

application to show its claim of priority. *Glaxo Grp. Ltd. v. Ranbaxy Pharm., Inc.*, 262 F.3d 1333, 1337 (Fed. Cir. 2001). This case is inapplicable, as the '042 patent does not claim priority to EP '136. Indeed, HP acknowledges, albeit in a footnote (Defs. Br. at 11 n.3), that this application was merely submitted as part of the Information Disclosure Statement.

In any event, even assuming that EP '136 is relevant here, the statements referenced by HP do not support its proposal. *Nowhere* in that cited response does it state that the selection scan line has to be “kept active during the entire ‘selection period,’” as HP contends. Defs. Br. at 11. Indeed, the words “active” and “inactive” do not appear in the document at all. *See* Defs.’ BB01.

Finally, HP fails to provide any argument or evidence to support that the “selection period” is a “time *duration*” rather than a “time *period*.” As explained in Solas’s opening brief, the intrinsic record, including Figure 4 and related description, confirms that the “selection period” is a period and not a duration. HP’s proposed use of duration is confusing and makes no sense in the context of the claim, as a duration simply specifies a difference between two times (e.g., T1-T2) without specifying the specific values of T1 and T2, or the relationship between T1 and T2 and the rest of the signal and voltage timings, whereas a “period” refers to a particular block of time having a specific beginning (e.g., T1) and end (e.g., T2). Flasck Decl. ¶ 104. To the extent that HP addresses this deficiency, Solas will respond. HP’s proposed construction should be rejected.

**B. “sequentially selects said plurality of selection scan lines in each selection period” ('042 patent claim 1)**

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning	selects said plurality of selection scan lines <u>one per each</u> of a plurality of <u>non-overlapping</u> selection periods

HP inexplicably replaces simple, straightforward terms (“sequentially” and “in each selection period”), which are used in accordance with their plain and ordinary meaning, with the

phrase “one per each of a plurality of non-overlapping selection periods.” This proposal is confusing and unsupported.

According to HP, its proposal is intended to “clarify that the ‘selection periods’ for different ‘selection scan lines’ must be ‘non-overlapping’ in time.” Defs. Br. at 12. But *nothing* in the claim limits this term in such a way. Flasck Decl. at ¶ 107. Instead, HP points to a singular statement in the specification which states, with respect to the “first embodiment” depicted in Figs. 1 and 4, that “the selection periods  $T_{SE}$  of the selection scan lines  $X_1$  to  $X_m$  do not overlap each other.” ’042 Patent at 9:29–31. HP’s attempt to import this limitation from an exemplary embodiment into the claim must be rejected. The Federal Circuit has repeatedly held that it is improper to import limitations from the specification absent an express statement so limiting the claim scope. *See, e.g., Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using “words or expressions of manifest exclusion or restriction.”); *Silicon Graphics, Inc. v. ATI Techs., Inc.*, 607 F.3d 784, 792 (Fed. Cir. 2010) (“A construing court’s reliance on the specification must not go so far as to ‘import limitations into claims from examples or embodiments appearing only in a patent’s written description . . . unless the specification makes clear that ‘the patentee . . . intends for the claims and the embodiments in the specification to be strictly coextensive.’”). And here, not only is there no such statement, but in fact the specification expressly states that “the scope of the invention is **not limited** to the embodiments and examples shown in the drawing.” ’042 Patent at 4:14–15 (emphasis added); *see also id.* at 28:53–56 (“The present invention is **not limited** to the above embodiments” (emphasis added)).

HP's reliance on purported "contemporaneous extrinsic evidence describing OLED circuits" (Defs. Br. at 13) likewise fails. This "evidence" has nothing to do with the invention claimed in the '042 patent. Nor is it "contemporaneous," as both documents are from 2008, four years after the claimed invention. And even ignoring these defects, HP fails to provide any authority that extrinsic evidence unrelated to the patent can be used to add extraneous limitations to the claims. Indeed, if the patent's own specification cannot be used to import limitations into the claims, then certainly HP's cherry-picked extrinsic evidence dated years after the claimed invention cannot be used to add limitations not found within the claims.

HP argues that Solas's proposal fails because this term is a "lengthy, technical phrase lacking any plain and ordinary meaning." Defs. Br. at 12–13. But all HP's proposal does is replace the words "sequentially" and "in each selection period," which are not technical terms, with a longer, far more "technical" and confusing phrase which finds no support in the intrinsic record. HP has failed to point to anything in the patent indicating that the word "sequentially" has a special meaning. Accordingly, this term should be given its plain and ordinary meaning. *See* Ex. 9 (defining "sequential" as "following in sequence"); Ex. 10 (defining "sequence" as "the following of one thing after another; sequential" and "sequential" as "following; subsequent; consequent"). HP's proposed construction should be rejected.

**C. "designating current" ('042 patent claim 1)**

Solas's Proposed Construction	HP's Proposed Construction
Plain and ordinary meaning, i.e., current designating a value corresponding to an image signal	current having a <u>specified current value that is held constant</u>

The dispute for this term centers around whether the value of the designating current must be "held constant," as HP proposes. Nothing in the claim supports such a limitation. Instead, HP



relies on a purported “express statement” in the specification, and “the fact that the ’042 Patent uses a ‘current programming’ technique that requires a constant current.” Def.’s Br. at 14. But the term “current programming” is not referenced anywhere in the patent, and HP does not even bother to explain what this purported term means. Further, the “express statement” in the specification relied on by HP does *not* provide that the current value must *always* be held constant. Rather, this statement simply provides that in the embodiment of Figure 4, the current source driver “holds the current value of the tone designating current  $I_{DATA}$  constant *in a period from the end of each reset period  $T_R$  to the end of the corresponding selection period  $T_{SE}$ .*” ’042 Patent at 11:50–57 (emphasis added). In other words, the designating current is held constant only in *one particular portion of the selection period of one exemplary embodiment.*

Importantly, the specification *never* describes the designating current as being held constant during the first reset portion of the selection period. *See id.* at 11:47–59. In fact, the specification describes several instances where the designating current varies and is *not* “held constant.” *See, e.g., id.* at 2:40–45 (“a data driving circuit which . . . supplies a designating current ***having a current value corresponding to an image signal*** to the plurality of current lines in a second part of the selection period after applying the reset voltage in the selection period” (emphasis added)); 16:31–32 (“The current value of the tone designating current  $I_{DATA}$  ***decreases*** as the luminance tone lowers.” (emphasis added)); 16:6–10 (“In the selection period  $T_{SE}$  of each row, the current source driver 3 controls the current terminals  $CT_1$  to  $CT_n$  to generate the tone designating current  $I_{DATA}$  having a ***current value corresponding to the image signal.***” (emphasis added)); Fig. 9 (depicting the current between  $T_R$  and  $T_{SE}$  as an arc).

HP’s proposal not only improperly attempts to import a limitation from the specification into the claims, but it also reads out preferred embodiments, including the very embodiment relied

on by HP. It is also directly contradicted by the claim language itself, which references “a designating current having a *current value corresponding to an image signal*.” HP’s proposal thus cannot be correct. *Silicon Graphics*, 607 F.3d at 792; *SanDisk Corp. v. Memorex Prods.*, 415 F.3d 1278, 1285–86 (Fed. Cir. 2005).

HP’s argument that Solas’s proposal attempts to “broaden the claims onto prior art ‘voltage programming’ driving methods” disparaged in the patent” is unsupported and a non sequitur. Defs.’ Br. at 14. Whether the patent purportedly disparages “voltage programming”—a term which is *not* found anywhere in the patent—is irrelevant. Nothing in the patent defines the designating current as “having a specified current value that is held constant.” Indeed, accepting HP’s proposal would make the invention completely unworkable, as claim 1 itself provides that the designating current has a “current value corresponding to an image signal.” The term should thus be given its plain an ordinary meaning. HP’s proposal should be rejected.

**D. “current lines” (’042 patent claim 1)**

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., conductive lines for carrying current	conductive lines, <u>each connected to a plurality of pixel circuits</u> and carrying current

HP does not and cannot dispute that the term “current lines” has an established plain and ordinary meaning in the field, and that the ’042 patent uses the term in accordance with that meaning. Flasck Decl. ¶ 110. Nonetheless, HP seeks to depart from the term’s plain meaning by injecting the extraneous limitation that the conductive lines are “each connected to a plurality of pixel circuits.” But contrary to HP’s assertion, nothing in the specification requires that that *each* conductive line is connected to a plurality of pixel circuits. To the extent that Figure 3 depicts such a configuration (which is not a requirement in the associated written description), this cannot be

used to import the limitation into the claim, especially in light of the patent's clear disclaimer that the claims are not limited to the disclosed embodiments. *Silicon Graphics*, 607 F.3d at 792; '042 Patent at 4:14–15, 28:53–56.

HP asserts that there is “no disclosure supporting Solas’s contention that a current line could connect to only one pixel circuit.” Defs.’ Br. at 15. This is a misrepresentation of Solas’s proposal, which does *not* require that the current line connects to “only one pixel circuit.”

HP’s assertion that Solas’s proposal “renders ‘current lines’ meaningless as every ‘conductive line’ is used for ‘carrying current’” also fails. Defs.’ Br. at 15. The mere fact that there are other types of conductive lines that can carry current does not support importing the limitation proposed by HP. It is clear from the context of claim 1, for example, that the “plurality of selection scan lines” and the “plurality of current lines,” which are separate and distinct limitations, are not the same thing. Further, claim 1 already specifies that the claimed configuration is limited to a device having current lines connected to pixel circuits, reciting “a plurality of pixel circuits which are connected to said plurality of selection scan lines and said plurality of current lines.” HP’s proposal renders this language redundant.

Contrary to HP’s assertions, is clear that “current lines” was not intended to be limiting, and was in fact intended to encompass all current lines. This usage is consistent with the plain and ordinary meaning of the term. When the patentee wanted specify a specific type of line, it did so, further confirming that it did not want to burden the term “current lines” with additional limitations. Accordingly, HP’s proposed limitation should be rejected; the term should be given its plain and ordinary meaning.

#### IV. DISPUTED TERMS FOR '615 PATENT

##### A. “the operation” ('615 patent claim 11)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, not indefinite. Within the claim phrase “a drive voltage for making the light emission control section perform the operation,” the term “the operation” refers to “generating a light emission drive current having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and supplying the light emission drive current to the light emission element.”	Indefinite

HP argues that the term “the operation” is indefinite because it lacks antecedent basis. More specifically, it argues that “no other part of Claim 11 recites any ‘operation’ or other phrase corresponding to ‘the operation.’” Defs. Br. at 17. But the only way to reach this conclusion would be to simply ignore the claim language itself, which, of course, is improper. Federal Circuit precedent holds that a lack of antecedent basis does not render a claim indefinite so long as here the term has a “reasonably ascertainable meaning,” which “must be decided *in context*.” *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006) (emphasis added). And as Solas explained, a POSITA would clearly understand “the operation” of the light emission control section to refer to the earlier—and *only*—recitation of what the light emission control section does: “generating a light emission drive current . . . and supplying the light emission drive current to the light emission element.” Flasck Decl. ¶¶ 113–16. This understanding is further supported by the specification. *Id.* ¶¶ 115–16; ’615 Patent at 5:8–12.

HP’s argument that “the operation” cannot refer to this phrase because it purportedly “includes two separate ‘operations’ of ‘generating a light emission drive current’ and ‘supplying the light emission drive current’” (Defs. Br. at 18) is wrong. The first instance of “light emission

control section” is immediately followed by the phrase “for *generating a light emission drive current* having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and *supplying the light emission drive current to the light emission element.*” A POSITA would readily understand that the “generating” and “supplying” of the light emission drive current to the light emission element are all part of “the operation” of the “light emission control section,” which is consistent with the specification. *See* Flasck Resp. Decl. ¶ 13; ’615 Patent at 5:8–12. Contrary to HP’s argument, a POSITA would understand that both are encompassed within “the operation” of the light emission control section—not “separate operations” as HP contends. Flasck Resp. Decl. ¶ 13. But there is nothing in the claim nor the specification indicating that they are “separate” operations. And neither HP nor its expert explain what they mean by “separate operations,” much less provide any evidence or explanation for their assertion. *Id.*

HP’s reliance on the other examples of “operations” identified in the specification (“precharge operation,” “threshold correction operation,” “writing operation,” etc.) also fails. The claim clearly and specifically refers to “*the operation*” of “*the light emission control section.*” The other types of operations in the specification are irrelevant. *See In re Downing*, 754 F. App’x 988, 996 (Fed. Cir. 2018) (holding that “the end user” was not indefinite where its meaning was clear from the surrounding claim language; “While the specification discloses many different end users, [] claim 1’s recitation of one end user could only refer to the end user using the product.”).

And contrary to HP’s assertion Solas is not proposing to “remedy the lack of antecedent basis by rewriting the claim and replacing ‘the operation’ with a 36-word phrase.” Defs. Br. at 18. Solas’s proposal is, and always has been, that the term be construed in accordance with its plain and ordinary meaning (which Defendants’ brief misleadingly fails to indicate). Solas’s proposal

includes a clarification for what a POSITA would understand and why the claim term is not indefinite. The Court can adopt the clarification in its ruling or a footnote.

The cases HP cite are easily distinguishable, and in fact undermine HP's argument. All three cases concern a plaintiff's attempt to rebut assertions of indefiniteness by arguing for the correction of purported "clerical errors" in the patent. For example, in *Smith v. ORBCOMM, Inc.*, the court found that the phrase "said inputs to be controlled" lacked antecedent basis because it was unclear what the phrase meant in the context of the claims. No. 2:14-CV-666, 2015 WL 5302815, at \*12 (E.D. Tex. Sept. 10, 2015). And while the term "inputs" was recited in other claim elements, those elements specified that the "inputs . . . are operable *for monitoring*." *Id.* In an attempt to remedy this deficiency, the plaintiff argued that the claims contained an "obvious clerical error" and that the phrase "inputs to be controlled" should be corrected to read "inputs to be monitored," while at the same time arguing for an alternative construction of the term. *Id.* Applying the standard for corrections set forth by the Federal Circuit in *Novo Industries*, the court rejected this argument, finding that the error was "not evident from the face of the patent," and that it if were, "Plaintiff would not continue to argue for an alternative construction." *Id.* at \*13.

Similarly, in *Smartflash LLC v. Apple Inc.*, in response to defendant's indefiniteness argument, plaintiff argued that the term "the card" was an "obvious clerical drafting mistake that should read 'the data carrier.'" *Smartflash LLC v. Apple Inc.*, 77 F. Supp. 3d 535, 560 (E.D. Tex. 2014). The court concluded that "[b]ecause the purported error is more than a misspelling or a missing letter, [plaintiff's] request to modify the plain language is inappropriate." *Id.* at 561.

Unlike the foregoing cases, Solas does not contend that the claim contains any errors. Solas's proposal is clear: the term "the operation" should be construed in accordance with its plain and ordinary meaning and is not indefinite.

**B. “precharge voltage” (’615 patent claim 11)**

<b>Solas’s Proposed Construction</b>	<b>HP’s Proposed Construction</b>
Plain and ordinary meaning	Indefinite

As made clear in the opening brief, the entire basis of HP’s indefiniteness that the term “precharge voltage” renders claim 11 indefinite because the specification purportedly describes two types of “precharge voltages” ( $V_{pre}$  and  $V_{pre13}$ ), and it would thus be “impossible” for a POSITA to determine which is referenced in the claim. Defs. Br. at 19. HP is wrong. A POSITA would understand there is no ambiguity and the claim “precharge voltage” corresponds to  $V_{pre}$  as described in the specification. Flasck Resp. Decl. ¶¶ 15–24.

A POSITA would readily understand that the  $V_{pre}$  and  $V_{pre13}$  voltages described in the specification are *two different voltages applied to two different components*. *Id.* ¶¶ 17–24. The first voltage,  $V_{pre}$ , is the voltage applied to the data line DL. ’615 Patent at 20:38–40 (“the selection transistor Tr 12 is turned on and *the data line DL to which the precharge Voltage  $V_{pre}$  is applied* . . .”). The second voltage,  $V_{pre13}$ , is the voltage applied to the capacitor  $C_s$  and appears across the gate source of transistor T13 as a result of  $V_{pre}$  being applied to the data line. *Id.* at 20:63–66 (“the potential difference  $V_{pre13}$  that is larger than the threshold  $V_{th13}$  of the drive transistor Tr 13 is *applied to the opposite ends of the capacitor  $C_s$*  (namely, between the gate and the source of the drive transistor Tr 13).”). Importantly,  $V_{pre}$  is repeatedly and consistently referred to as the “**precharge voltage  $V_{pre}$** ” all throughout the specification. *See, e.g., id.* at 18:27–28; 19:2; 19:46; 20:22–45; 24:1; 26:42; 30:2; 32:39; 33:62; 34:6; 35:4; 38:15; 39:34; 40:36–41; 41:27–32. In contrast,  $V_{pre13}$  is consistently referred to as the “**drive transistor precharge voltage  $V_{pre13}$** .” *See, e.g., id.* at 21:1–8; 23:65; 26:37–38; 28:64–67; 29:31–32; 30:30–42.  $V_{pre13}$  is *never* referred to as the “precharge voltage.”

That the “precharge voltage  $V_{pre}$ ” is applied to the data line is consistent with the language of claim 11, which provides that “the data driver applies a precharge voltage exceeding a threshold value of the drive transistor to the data line, and the light emission drive circuit applies the *precharge voltage applied to the data line* to the electric charge accumulating section via the writing control section.” Thus, contrary to HP’s assertions, a POSITA would easily be able to determine that the “precharge voltage” in claim 11 corresponds to the “precharge voltage  $V_{pre}$ ,” and *not*  $V_{pre13}$ . Flasck Resp. Decl. ¶¶ 22–24.

As Solas’s expert Mr. Flasck explains: “A POSITA would view the claim term in view of the specification and find no source of confusion here. It would be clear to a POSITA that the ‘precharge voltage’ is a voltage applied to the data line that causes a ‘drive transistor precharge voltage’ to appear as a voltage between the gate and source of the drive transistor.” *Id.* ¶ 24. Therefore, there is no ambiguity. The term is not indefinite.

The *Teva Pharmaceuticals* case HP cites is distinguishable (and was also vacated by the Supreme Court) and does not support a finding of indefiniteness. In that case, it was *undisputed* that the claims containing the term “molecular weight” contained an ambiguity because the claim language did not indicate which of the three average molecular weight measures referenced in the specification was intended. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1369 (Fed. Cir. 2013), *vacated*, 574 U.S. 318 (2015). The plaintiff attempted to resolve this ambiguity by relying on statements from the prosecution history, but as noted by the court, “two of its prosecution statements directly contradict each other and render the ambiguity insoluble.” *Id.* Nor did the specification resolve the ambiguity. *Id.* Accordingly, the claim was found to be indefinite. Here, in contrast, it is clear from the language of claim 11 itself and the at least 20 references in the



specification to “precharge voltage  $V_{pre}$ ” that the term “precharge voltage” corresponds to  $V_{pre}$ , and not  $V_{pre13}$ . HP’s attempt to manufacture ambiguity where none exists fails.

**C. “writing control section” (’615 patent claim 11)**

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., circuit section that controls writing	a transistor that controls the writing of both the gradation sequence signal and the precharge voltage from a data line to the charge accumulating section

Claims mean exactly what they say. The “writing control section” is a circuit section (of the light emission drive circuit) that controls writing. HP’s primary argument against Solas’s construction is that it “erases any distinction between the ‘writing control section’ and the other ‘sections’ recited in the claim[.]” Defs. Br. at 21. HP is flat wrong.

As Solas explained, claim 11 recites a “light emission drive circuit” having four recited sections: (1) “an electric charge accumulating section,” (2) “a light emission control section,” (3) “a writing control section,” and (4) “a voltage control section.” Thus, the claim language itself states that each are different sections of the light emission drive circuit with different functions, i.e., accumulating electric charge, controlling light emission, controlling writing, and controlling voltage. And if there were any doubt, other claim limitations put that to rest.

The claim describes each of the four sections in substantial detail, describing the exact functions of each. For example, the claim states that the “writing control section” controls writing by “controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section”:

11. A display unit comprising:  
 a plurality of display pixels each of which includes a light emission element and a light emission drive circuit having an electric charge accumulating section for accumulating electric charges based on a gradation sequence signal to designate a luminance gradation sequence in accordance with display data, a light emission control section for generating a light emission drive current having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and supplying the light emission drive current to the light emission element, a writing control section for controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section, and a voltage control section for controlling a drive voltage for making the light emission control section perform the operation, respectively;

This claim language alone contradicts HP's argument that the "writing control section" is indistinguishable from other sections of the light emission drive circuit.

HP advances a variation of this argument, contending that Solas's proposal of "circuit section that controls writing" is "flawed because it does not specify *what* is being written and, as a result, could describe any of the other 'sections' in Claim 11, which also control writing." Defs. Br. at 23. This fails. As discussed, the "writing control section" is for "controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section." This is different from each of the other sections, which have different recited functions. There is no confusion between the "writing control section" and other sections.

To the extent the claim language does not specify exactly "*what*" must be written by the "writing control section," that is because the claim is not limited to a specific way of carrying out its function. And it is no reason to import the alleged "what" into the term. The Court should not rewrite the claim differently from what the patentee claimed and the examiner allowed.

HP's other arguments are all based on the specification and boil down to importing

limitations from embodiments into the claims. *See* Defs. Br. at 21–22. For example, HP discusses Figs. 3A and 4A and adopts alleged features of those examples into its proposal. Of course, this is prohibited under Federal Circuit law. *See Hill-Rom*, 755 F.3d at 1371 (Fed. Cir. 2014) (“the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’”).

The patentee claimed a “writing control section,” which a POSITA would understand to mean a section of the driving circuit—not merely a transistor. Solas Br. at 27; Flasck Decl. ¶¶ 122–23. A POSITA would understand that such circuitry may comprise a transistor but is not limited to one. *Id.* Indeed, the patentee knew how to write “transistor” (both in the claims and specification) but chose to *claim* a “section” of the light emission drive circuit. And HP does not point to anything that resembles lexicography or disclaimer. Flasck Decl. ¶¶ 123. Therefore, under Federal Circuit law, the court should find that “writing control section” carries its plain meaning, which is: “circuit section that controls writing.”

**D. “data lines” (’615 patent claim 11)**

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., conductive lines for supplying information	conductive lines, <b><u>each connected to</u></b> and carrying data to <b><u>a plurality of light emission drive circuits</u></b>

HP does not dispute that “data lines” is a well-known term of art. Nor does HP argue that the patentee unequivocally imparted a novel meaning to this well-known term. Instead, all of HP’s arguments are non sequiturs. The ’615 patent uses “data lines” in accordance with its plain meaning. That the patent figures show data lines connected to many drive circuits does not suggest the patentee intended to redefine “data lines.” Nor does it suggest the patentee set forth a special kind of data line that can *only* connect to multiple drive circuits. That is precisely why courts do

not import features from embodiments into ordinary terms. That is only appropriate where the patentee evinces a clear intent to relinquish claim scope—i.e., thorough express lexicography or disclaimer. *See Thorner*, 669 F.3d at 1366–67 (“[W]e do not redefine words. Only the patentee can do that.”). Both are absent here and HP does not argue otherwise.

HP argues that “Solas’s proposal is incorrect as it permits each ‘data line’ to connect to only *one* light emission drive circuit.” Defs. Br. at 24. But that does not mean Solas’s construction is incorrect—it means only means the plain meaning of data line *can*. The plain meaning of data lines is “conductive lines for supplying information.” Solas Br. at 27–28; McGraw-Hill at 490. Such a line can supply information to one, as well as many, drive circuits. HP provides zero evidence the plain meaning of “data lines” excludes connecting to only one drive circuit.

HP notes that OLED display panels typically have millions of pixel circuits. Defs. Br. at 24. That is irrelevant. If such an OLED happened to have a data line connected to one pixel circuit, that would still be a data line. Likewise, if an OLED happened to have only one pixel circuit, that circuit could still be connected a data line. HP provides no evidence that OLEDs must always use special “one-to-many” data lines that become inoperable when connected to a single circuit.

Finally, Defendants’ insistence of defining “data lines” as “lines for carrying data” is unhelpful and inaccurate. As Solas’s expert Mr. Flasck explains, a POSITA would understand data lines to be conductive lines for supplying information. Flasck Decl. ¶ 124. This understanding of corroborated by technical dictionaries, which describe data lines as conductors used to send information. McGraw-Hill at 490 (“data transmission line” : “system of electrical *conductors* . . . used to *send information* from one place to another”) (emphasis added). HP provides no contrary evidence from a POSITA, only attorney argument. Nor has HP explained why Solas’s proposal of “supplying information” is incorrect. Solas’s proposal should be adopted.

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Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I certify that on July 16, 2020, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system pursuant to Local Rule CV-5(a)(3)(A).

/s/ Philip X. Wang  
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